



MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

September 29, 2017

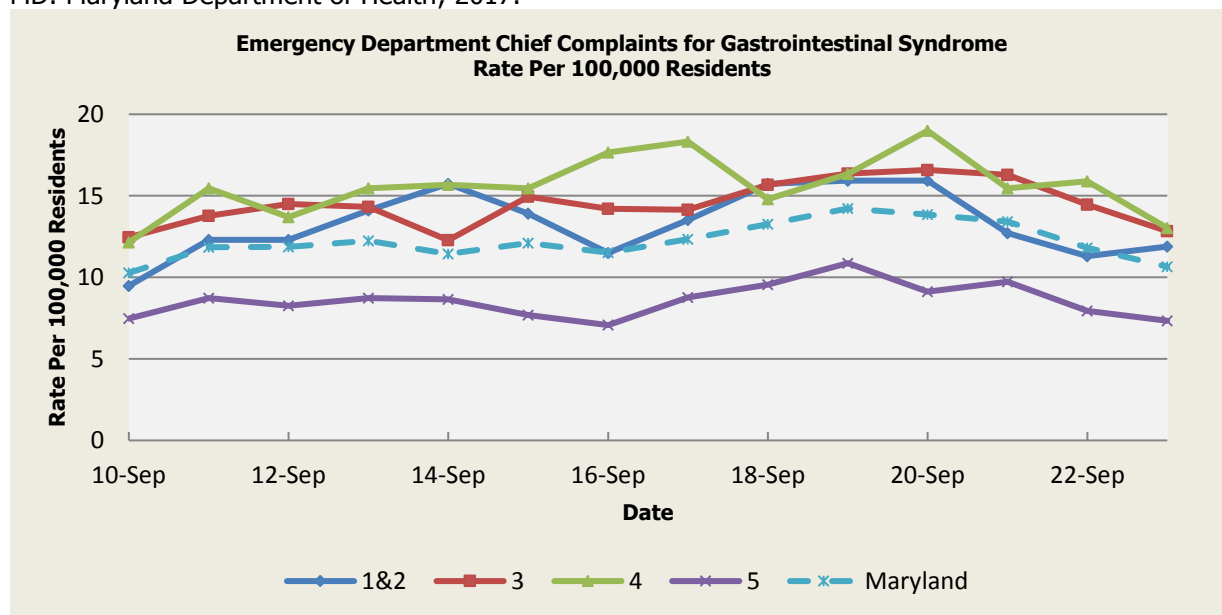
Public Health Preparedness and Situational Awareness Report: #2017:38 Reporting for the week ending 09/23/17 (MMWR Week #38)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts
Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

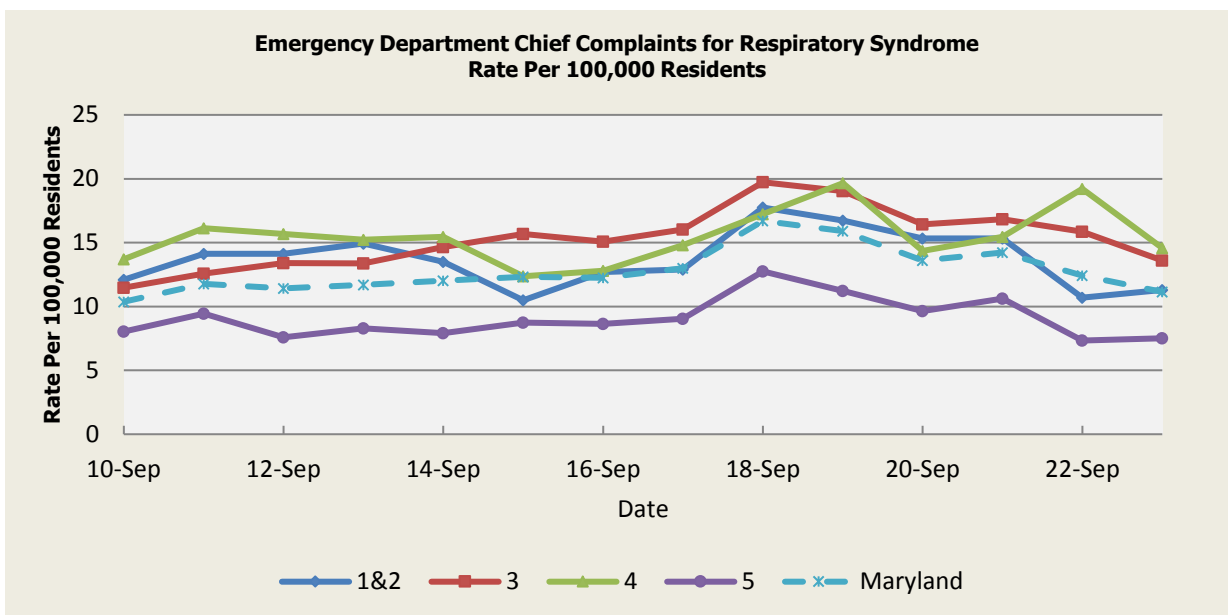
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There was one (1) Gastrointestinal Syndrome outbreak reported this week: one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.24	14.32	14.63	9.76	12.43
Median Rate*	12.91	14.80	15.02	10.22	12.95

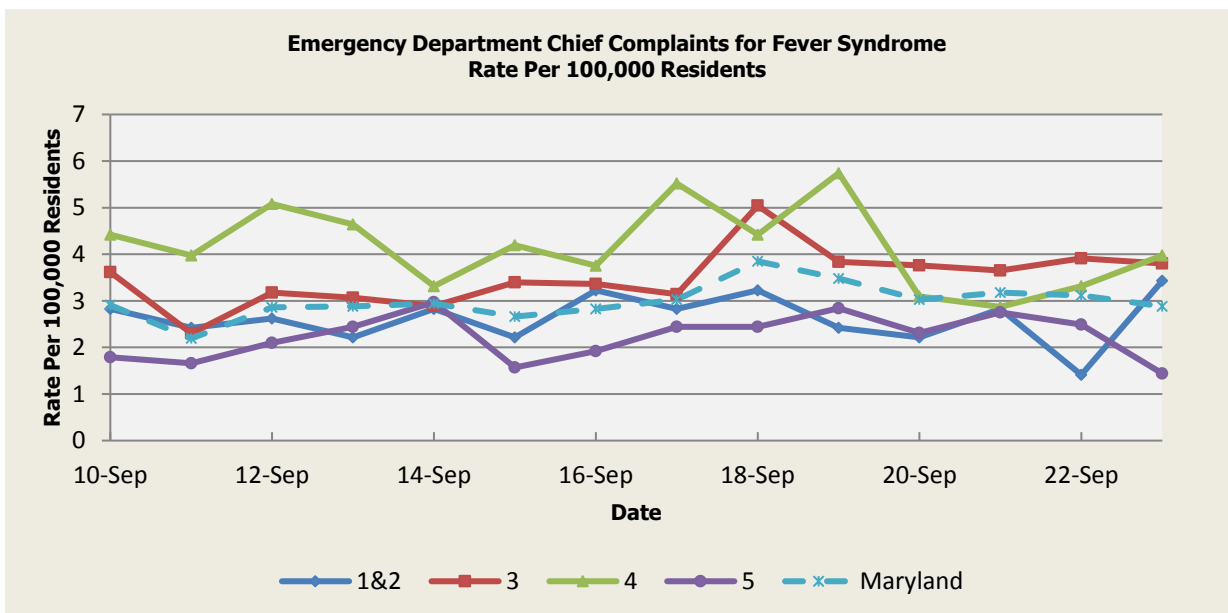
* Per 100,000 Residents



There were four (4) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Variant Influenza associated with a Fair (Region 3); one (1) outbreak of ILI associated with a Daycare Center (Region 4); one (1) outbreak of Pneumonia in a Nursing Home (Region 3); one (1) outbreak of Pneumonia in an Assisted Living Facility (Regions 1&2).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.42	13.70	13.60	9.44	11.87
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

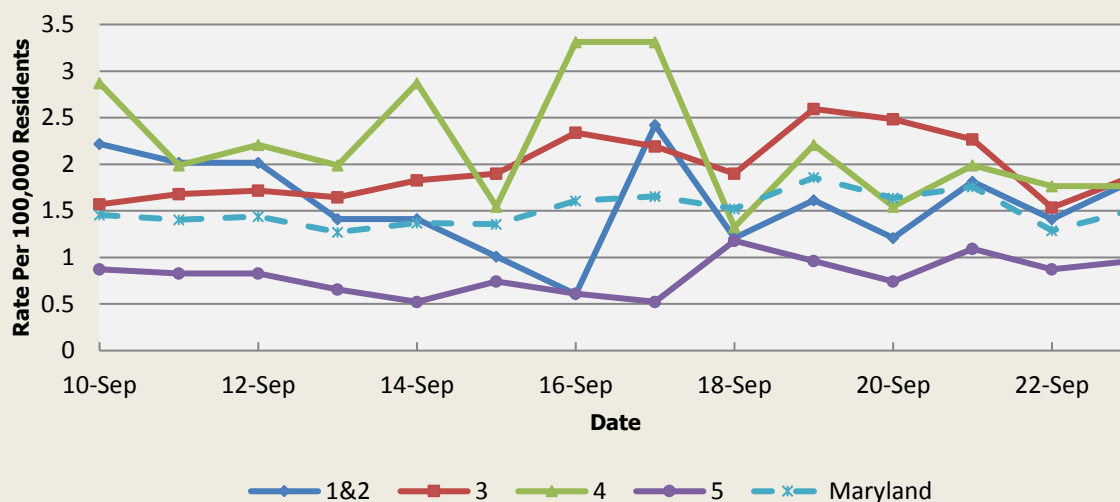


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.87	3.67	3.77	2.92	3.32
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



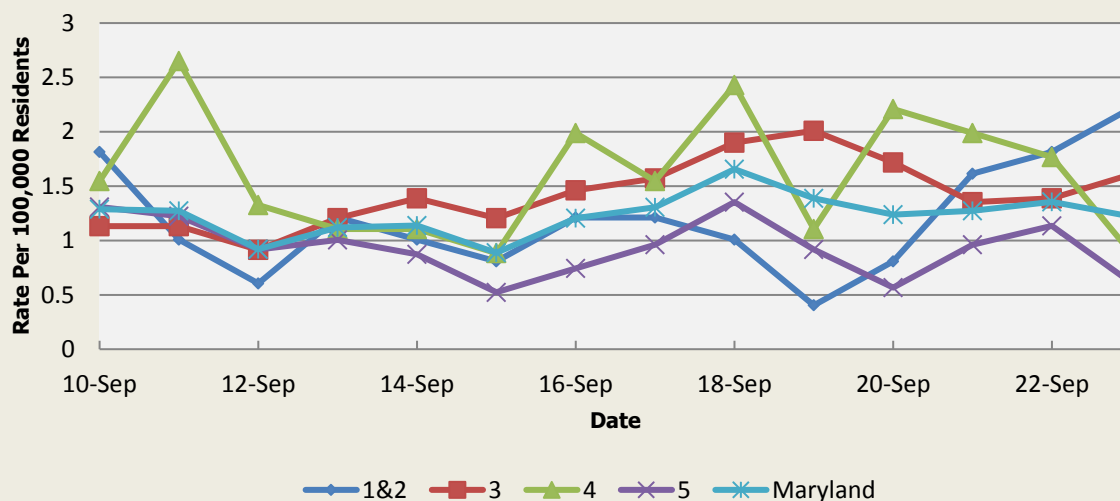
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.99	1.79	1.92	0.91	1.40
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

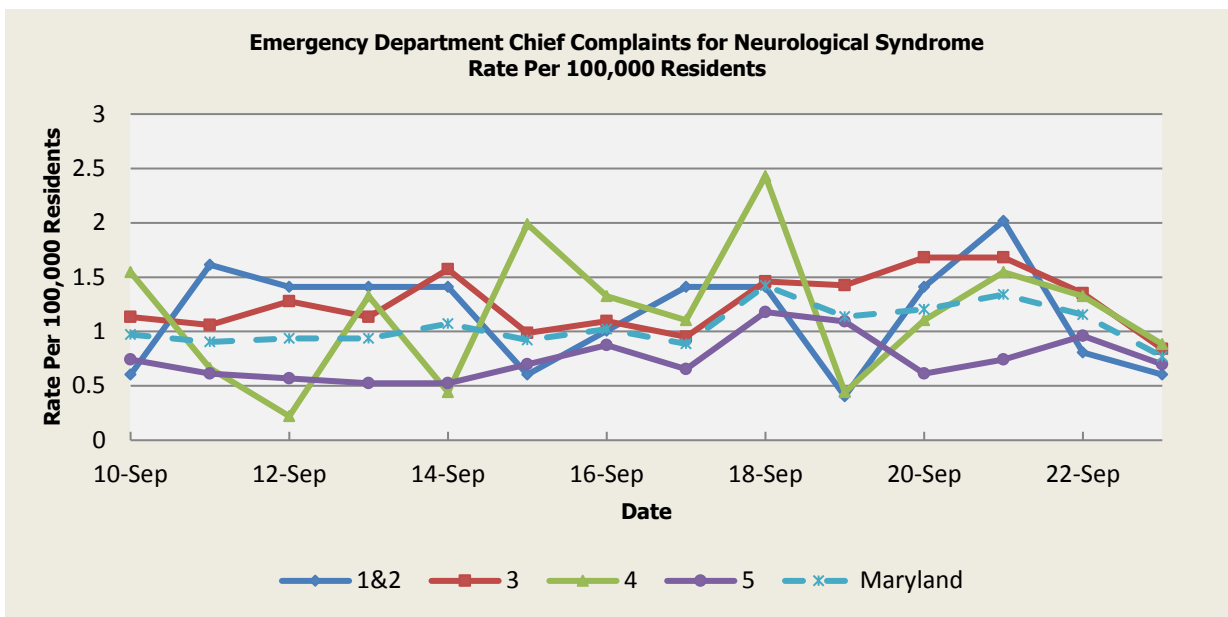


There were seven (7) Rash Syndrome outbreaks reported this week: four (4) outbreaks of Hand, Foot, and Mouth Disease associated with Daycare Centers (Regions 3,4,5); two (2) outbreaks of Scabies in Nursing Homes (Region 3); one (1) outbreak of Scabies in a Hospital (Region 3).

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.18	1.66	1.68	0.97	1.36
Median Rate*	1.21	1.68	1.77	1.00	1.39

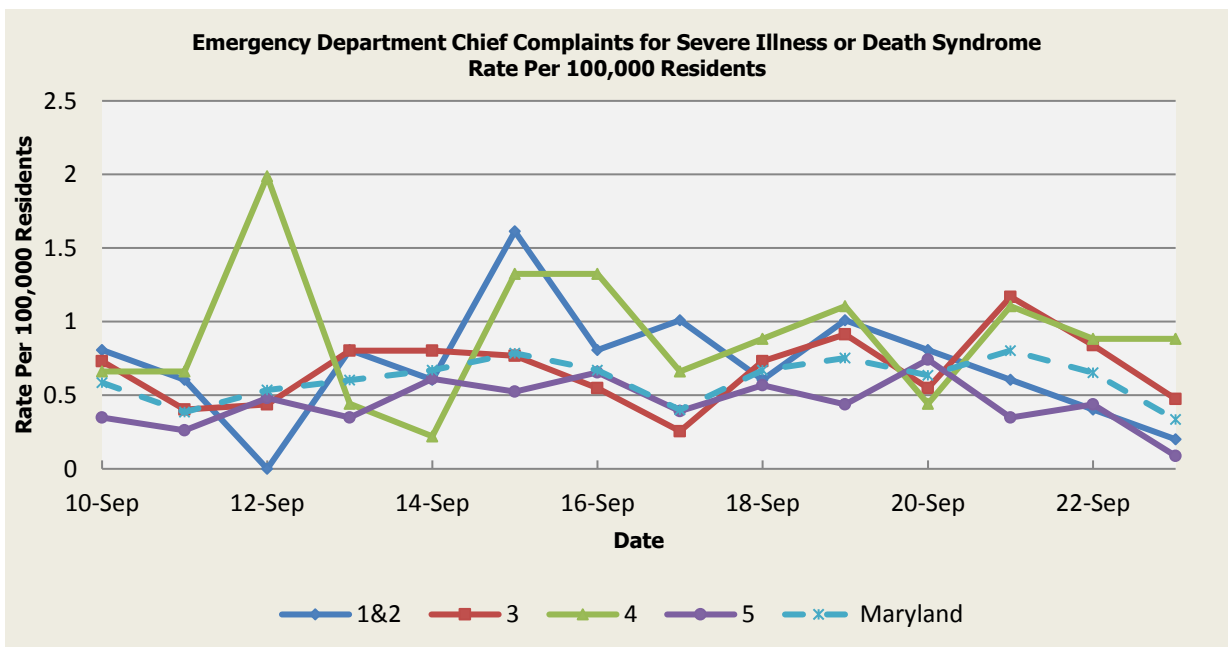
* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.62	0.76	0.65	0.48	0.63
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

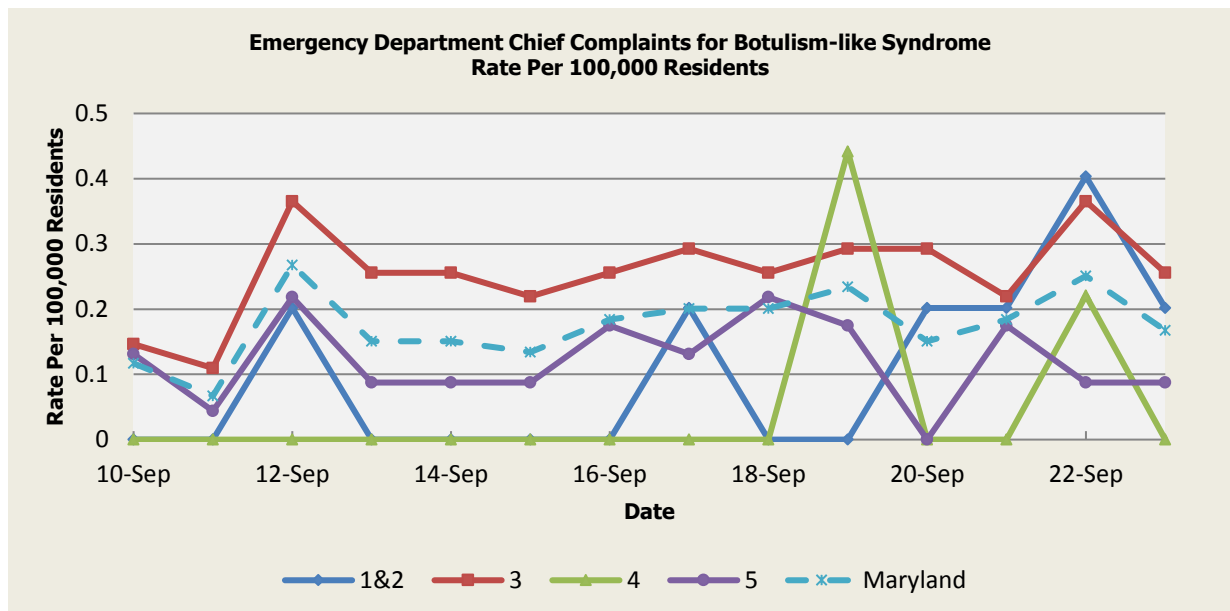


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.61	0.87	0.77	0.44	0.68
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

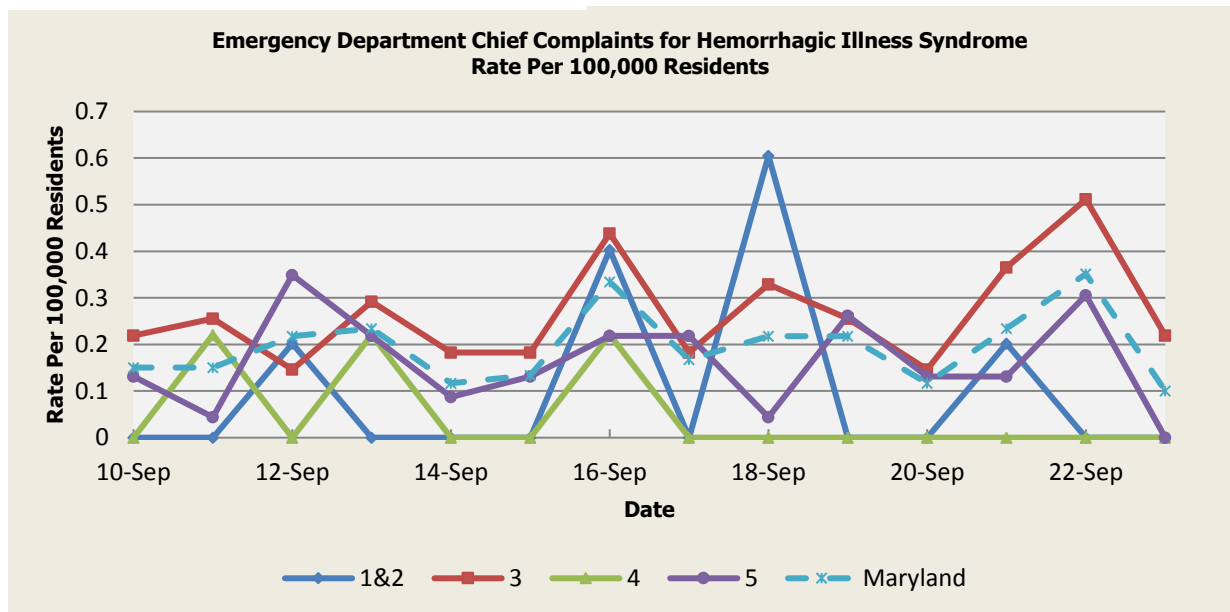
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 09/10 (Region 5), 09/12 (Regions 1&2,3,5), 09/13 (Region 3), 09/14 (Region 3), 09/15 (Region 3), 09/16 (Regions 3,5), 09/17 (Regions 1&2,3,5), 09/18 (Regions 3,5), 09/19 (Regions 3,4,5), 09/20 (Regions 1&2), 09/21 (Regions 1&2,5), 09/22 (Regions 1&2,4), 09/23 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.05	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

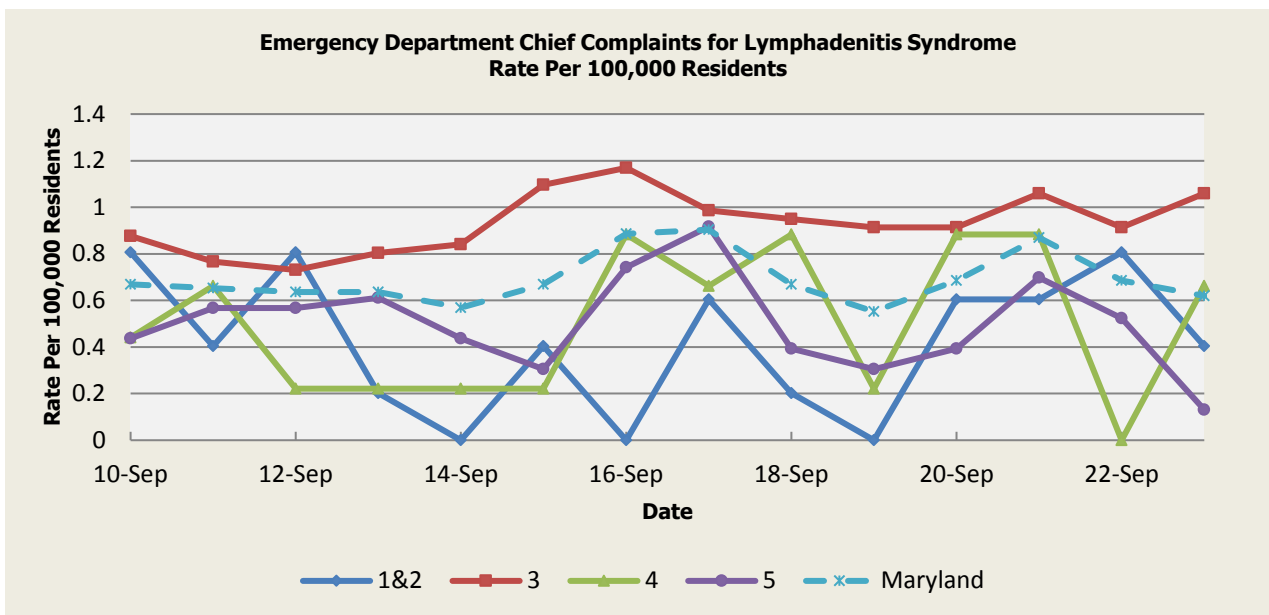
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 09/11 (Region 4), 09/12 (Regions 1&2,5), 09/13 (Regions 4,5), 09/16 (Regions 1&2,4,5), 09/17 (Region 5), 09/18 (Regions 1&2), 09/19 (Region 5), 09/21 (Regions 1&2), 09/22 (Region 5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.12	0.03	0.09	0.09
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 09/10 (Regions 1&2), 09/11 (Region 4), 09/12 (Regions 1&2), 09/13 (Region 5), 09/15 (Region 3), 09/16 (Regions 3,4,5), 09/17 (Regions 1&2,4,5), 09/18 (Region 4), 09/20 (Regions 1&2,4), 09/21 (Regions 1&2,3,4,5), 09/22 (Regions 1&2), 09/23 (Regions 3,4). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.29	0.50	0.33	0.30	0.39
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

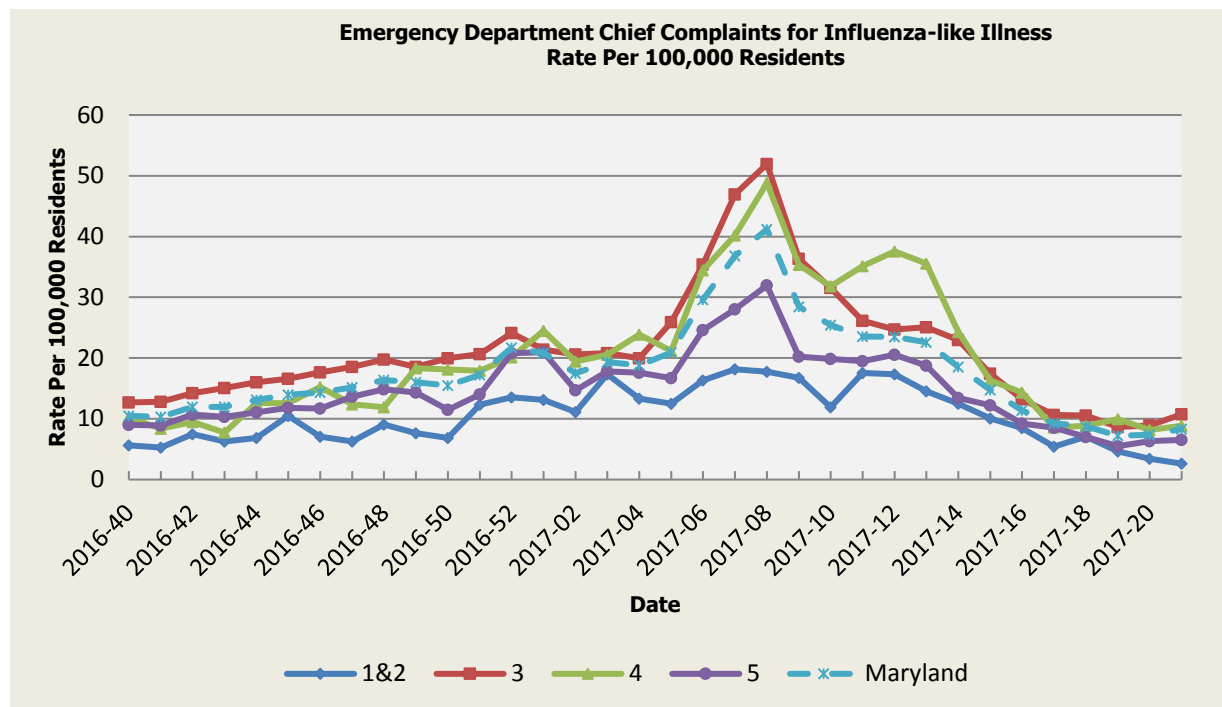
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	September			Cumulative (Year to Date)**		
	2017	Mean*	Median*	2017	Mean*	Median*
Vaccine-Preventable Diseases						
Aseptic meningitis	23	42.2	42	279	341.8	315
Meningococcal disease	1	0.4	0	5	4	4
Measles	0	0.2	0	4	4.4	4
Mumps	0	1.6	1	23	40.2	18
Rubella	0	0	0	1	4.4	3
Pertussis	8	33.6	28	165	253	267
Foodborne Diseases						
Salmonellosis	29	87	93	634	739.8	747
Shigellosis	8	17.2	15	191	159.8	188
Campylobacteriosis	28	51.4	55	610	593	593
Shiga toxin-producing Escherichia coli (STEC)	10	11.2	10	138	116.6	109
Listeriosis	2	1	1	21	13.4	13
Arboviral Diseases						
West Nile Fever	0	3.8	5	3	13.2	11
Lyme Disease	114	211.2	198	2725	2454.8	2346
Emerging Infectious Diseases						
Chikungunya	0	0.4	0	0	5.2	0
Dengue Fever	1	1.4	1	19	22.6	16
Zika Virus***	0	1.6	0	2	12.6	6
Other						
Legionellosis	21	14.6	13	180	137.2	139

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of September 29, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 56.

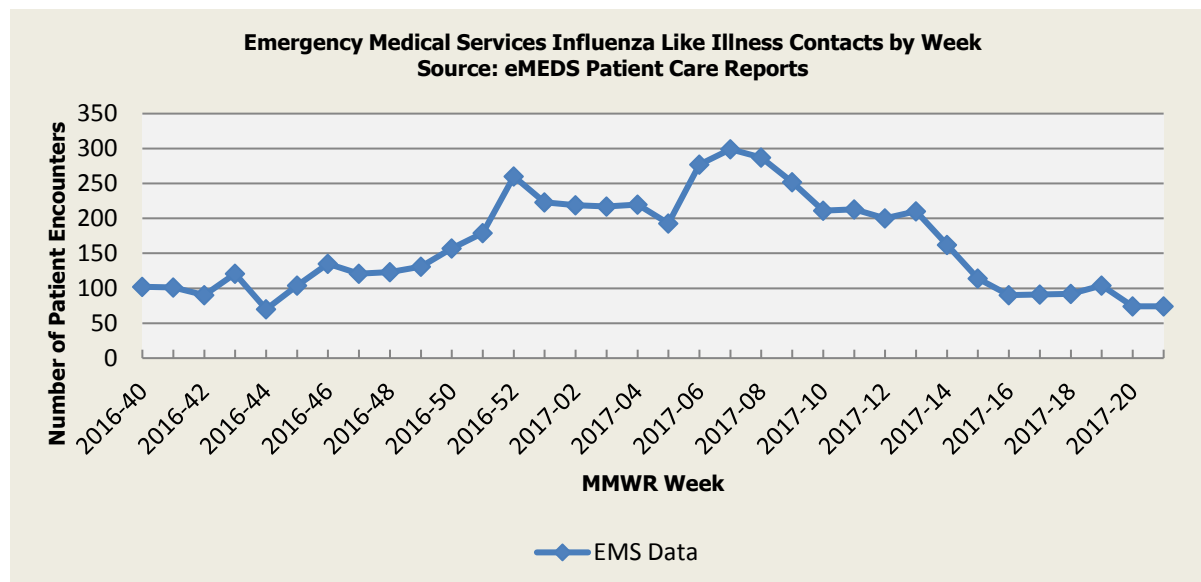
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).



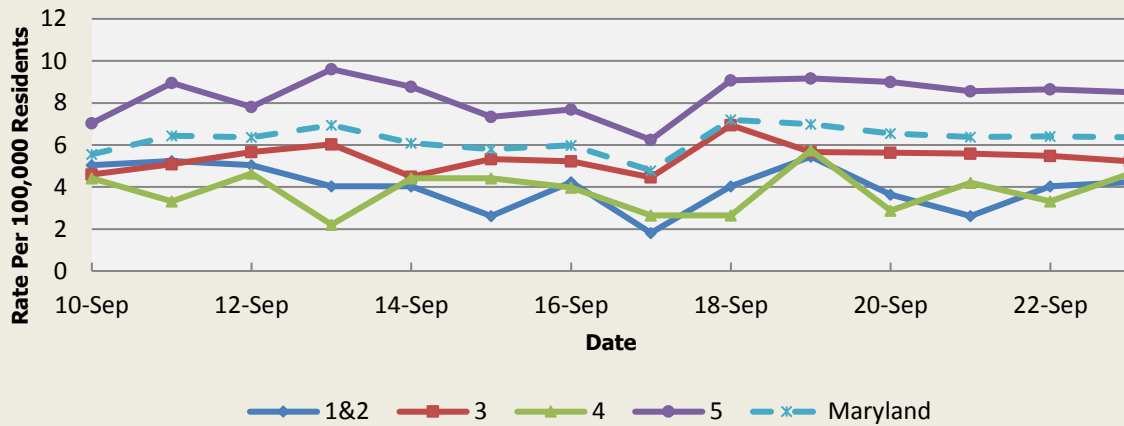
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	167.70	223.96	205.49	194.23	206.50
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Medication Sales Related to Influenza Rate Per 100,000 Residents

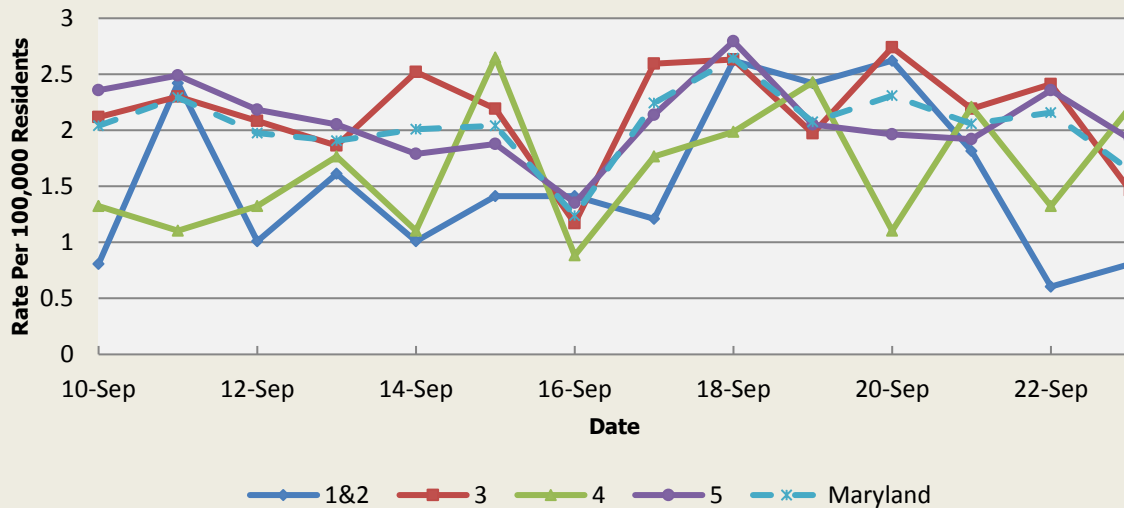


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.58	4.65	2.59	8.01	5.69
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

Over-the-Counter Thermometer Sales Rate Per 100,000 Residents



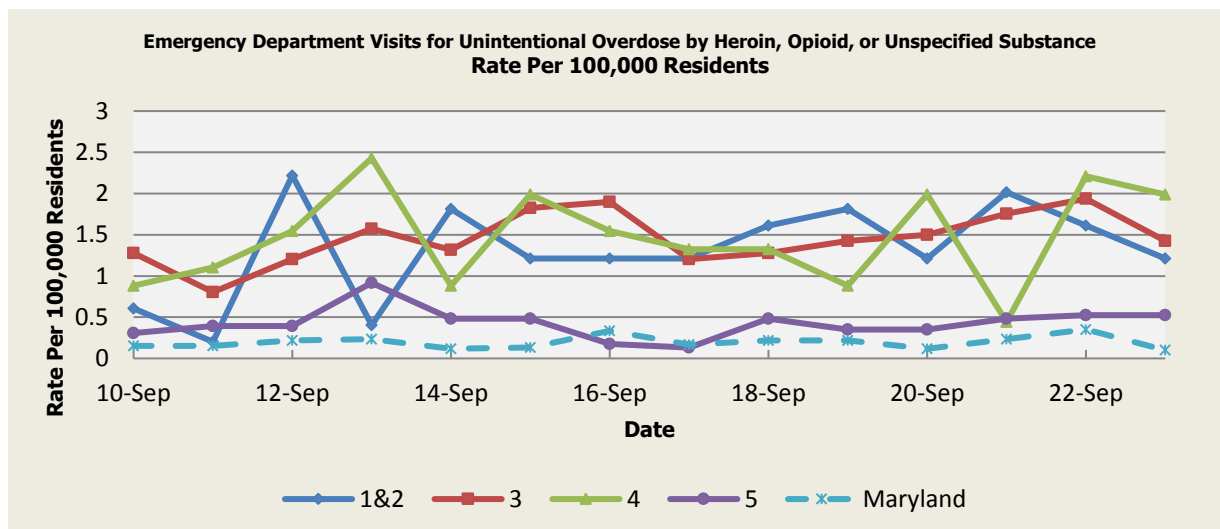
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.19	3.06	2.37	4.10	3.42
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

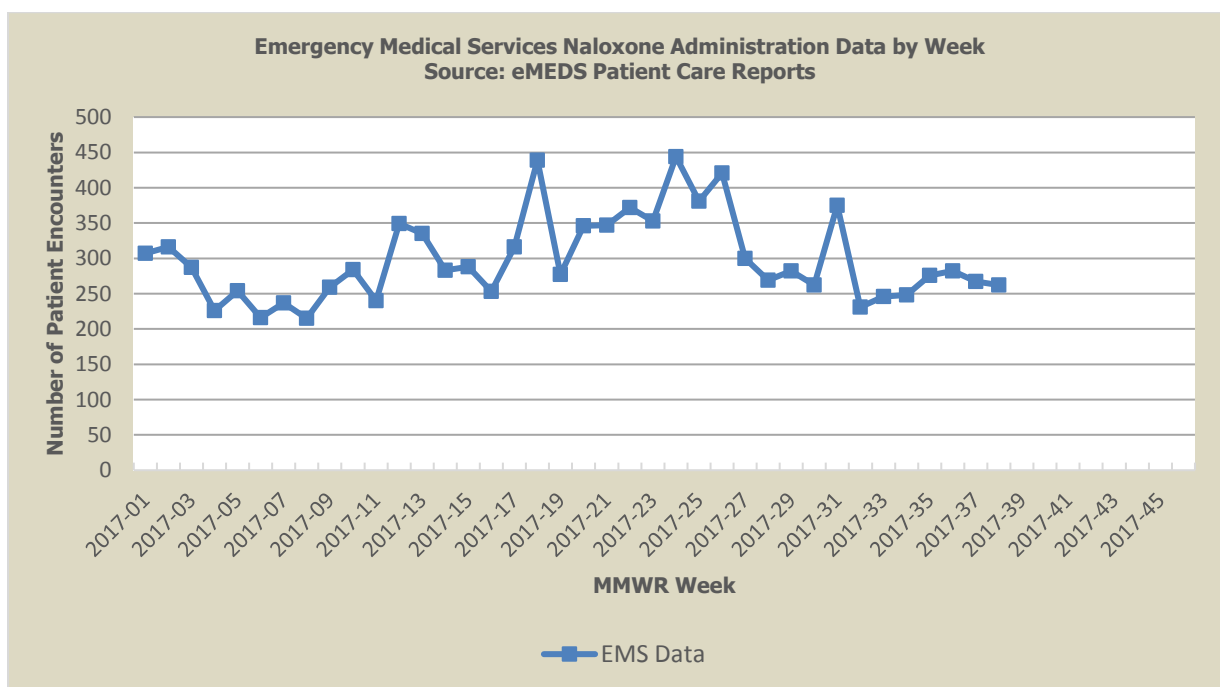
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



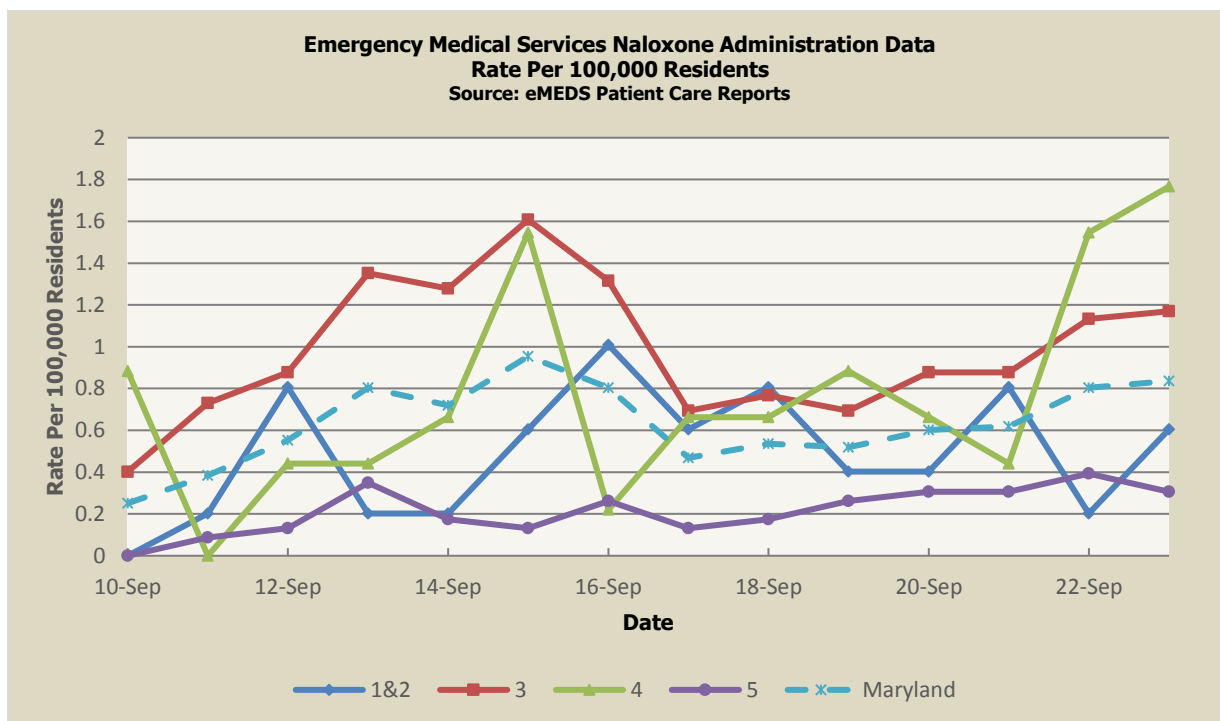
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.35	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 25, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA:

There were no reports of cases of avian influenza in the United States or internationally at the time that this report as compiled.

HUMAN AVIAN INFLUENZA:

There were no reports of cases of avian influenza in the United States or internationally at the time that this report as compiled.

NATIONAL DISEASE REPORTS:

INFLUENZA, SWINE, H3N2V (MARYLAND), 23 Sept 2017, Maryland authorities are investigating 5 cases of swine flu in pigs that were recently exhibited at the Charles County Fair. Seven Maryland residents have contracted a strain of swine flu from infected pigs at the Charles County fair. The infected people had close contact with the 5 pigs recently exhibited at the Charles County Fair that tested positive for swine flu, the Maryland Department of Health said Wednesday [20 Sep 2017]. None of the infected individuals has developed serious illness or been hospitalized. Read More: <https://www.promedmail.org/post/5335679>

LEGIONELLOSIS (MINNESOTA), 23 Sept 2017, State [Minnesota] and local health authorities say they're investigating 2 cases of Legionnaires' disease in residents at the Silver Creek on Main assisted living facility in Maple Grove. The 1st resident's symptoms began on 22 Aug 2017, and the 2nd resident's symptoms began on 12 Sep 2017. Both residents were hospitalized and are recovering. Read More: <https://www.promedmail.org/post/5336156>

BRUCELLOSIS (WYOMING), 23 Sept 2017, A Wyoming farmer had been infected with the human form of brucellosis. Undulant fever, also called Bang's disease, is marked by an irregular pattern of joint pain, fatigue, headaches, high fever, chills, drenching sweats, backache, weight loss, and loss of appetite. The farmer experienced a lot of that. Lasting effects include arthritis, depression, and organ swelling. Read More: <https://www.promedmail.org/post/5336298>

SALMONELLOSIS (MINNESOTA), 24 Sept 2017, A total of 2 people were hospitalized as a result of a salmonellosis outbreak at a Duluth nursing facility in August 2017, according to the Minnesota Department of Health. All told, 15 people became ill in mid-August 2017 at Bayshore Residence and

Rehabilitation, said Doug Schultz, a health department spokesman, but only 5 -- all residents -- tested positive for *Salmonella*. The 15 included 4 staff members and 11 residents, 2 of whom were hospitalized, Schultz said. None died. Read More: <https://www.promedmail.org/post/5336320>

LEGIONELLOSIS (NEW YORK), 24 Sept 2017, Residents of a Forest Hills apartment complex were concerned after a Legionnaires' disease outbreak left one person dead, and made another ill. City officials said one person got sick, and another with existing health problems died. The health department has told residents that the water is safe to drink, but warned the elderly to take extra precautions. Read More: <https://www.promedmail.org/post/5336870>

HEPATITIS A (MICHIGAN), 24 Sept 2017, Michigan health officials are continuing to investigate an outbreak of hepatitis A in the southeast part of the state. The Michigan Department of Health and Human Services (MDHHS) reports from 1 Aug 2016 to 15 Sep 2017 there have been 319 confirmed cases of hepatitis A, including 14 deaths. Of those cases, nearly 86 percent have been hospitalized. Read More: <https://www.promedmail.org/post/5337251>

ANTHRAX (NORTH DAKOTA), 25 Sept 2017, North Dakota has had its 1st confirmed case of anthrax this year [2017] in Sioux County, where 8 head of cattle died out of a herd of about 200. State Veterinarian Susan Keller says the surviving portion of the herd has been vaccinated, and the cattle are now under quarantine as required by state law. The case was confirmed [21 Sep 2017] by the North Dakota State University Veterinary Diagnostic Laboratory based on samples submitted by a veterinarian with the Mandan Veterinary Clinic. Read More: <https://www.promedmail.org/post/5339201>

VIBRIO VULNIFICUS (FLORIDA), 25 Sept 2017, Florida state health officials have reported 23 *Vibrio vulnificus* cases in 2017 through mid-September and of this total, 5 cases have been seen in the Tampa Bay area. Cases of the bacterial infection have been recorded in Hillsborough (2), Pinellas (1), Pasco (1) and Polk (1) counties. Read More: <https://www.promedmail.org/post/5339811>

INTERNATIONAL DISEASE REPORTS:

CRIMEAN-CONGO HEMORRHAGIC FEVER (PAKISTAN), 23 Sept 2017, A 30-year-old man who died of the deadly Crimean-Congo hemorrhagic fever at a private hospital a day ago became the 1st citizen of Karachi to have been killed by the virus this year [2017], provincial health authorities said on Monday [18 Sep 2017]. Read More: <https://www.promedmail.org/post/5335688>

YELLOW FEVER (AFRICA), 24 Sept 2017, The 2 patients diagnosed with yellow fever in Oro-Ago in Ifelodun Local government area of Kwara state are now medically stable. The patients are responding to treatment and are expected to make full recovery. Read More: <https://www.promedmail.org/post/5336862>

AFRICAN SWINE FEVER (UKRAINE), 24 Sept 2017, In the backyard, one pig died. Samples were taken from the dead pig and African swine fever virus was detected by PCR method. The carcass was destroyed; disinfection, quarantine and all related measures were conducted. Read More: <https://www.promedmail.org/post/5337968>

PLAGUE (IRAQ), 25 Sept 2017, The Parliamentary Health and Environment Committee revealed on [Sun 24 Sep 2017] the spread of plague and called for a national campaign against rodents that are causing the disease. The deputy head of the Parliamentary Health and Environment Committee, Fares Al-Barefkani, told Alghad Press that "new cases of plague have been identified, and the causes of the disease are known and are related to the poor municipal, disease control, sewage, and landfill services, in addition to widespread residential slums." Read More: <https://www.promedmail.org/post/5338971>

HEPATITIS A (JORDAN), 25 Sept 2017, A total of 27 children suffered from hepatitis A in Al-Akaider area, 30 km (18 mi) northeast of Al-Mafraq city within Hosha district [Mafraq province]. This prompted the Ministry of Health to send a specialized epidemiological team to determine the causes of the outbreak. Read More: <https://www.promedmail.org/post/5338989>

PARATYPHOID FEVER (NEW ZEALAND), 25 Sept 2017, Hawke's Bay District Health Board is investigating 4 confirmed cases of paratyphoid fever and is following up 3 suspect cases. All 4 confirmed cases have required hospital care at Hawke's Bay Hospital. At least 2 of the cases ate mussels gathered from Napier's Ahuriri area. The district health board is also concerned that mussels from the same area. Read More: <https://www.promedmail.org/post/5339530>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

